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Hubert Cecile Francois Martens

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EXAMINER

KLIMOWICZ, WILLIAM JOSEPH

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/563,935
Filing Date: January 09, 2006
Appellant(s): MARTENS, HUBERT CECILE FRANCOIS

Dicran Halajian
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed April 13, 2009 appealing from the Office action mailed November 12, 2008.

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(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The **change** is as follows:

Whether claims 1-3, 7-8, 10-12, **15** and 16 of U.S. Patent Application Serial No. 10/563,935 are unpatentable under 35 U.S.C. 102(b) over EP 1,067,535 (Muramatsu).

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

EP 1 067 535 A2

MURAMATSU et al.

01-2001

Applicant's admitted prior art

(Examiner's unchallenged

Official Notice)

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 7, 8, 10-12, 15 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Muramatsu et al. (EP 1 067 535 A2).

As per claim 1, Muramatsu et al. (EP 1 067 535 A2) discloses a recordable optical record carrier (e.g., FIG. 1) for recording information using a radiation beam having wavelength λ (*any* wavelength, since the claim *does not in any manner limit the length of the wavelength*) and incident on an entrance surface (lower surface of (1) as seen in FIG. 1) of the optical record carrier comprising, in this order: a protective layer (1) facing the entrance surface, a first recording stack (L0) (2), said recording stack (2) comprising a recording layer of an organic dye material and a groove structure (e.g., see paragraph [0017]), a transparent spacer layer (3 and/or (4)) sandwiched between neighboring recording stacks, and a second recording stack (LN) comprising a recording layer (5), wherein the groove depth of the recording layer (2) of the first recording stack (L0) (2) is in a range from $0.241 \cdot \lambda / n_s$ to $0.362 \cdot \lambda / n_s$, where n_s is a refractive index of a material in a land between grooves on the groove structure.

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Note that the claim does not in any way specify a wavelength, or range of wavelengths, thus rendering the claim open to all wavelengths of electromagnetic radiation, such that the aforementioned range is met by the structural grooves and lands of Muramatsu et al. (EP 1 067 535 A2); neither is the claim limited the by a material or range for the refractive index of material.

Moreover as well, the claim is drawn to “a recordable optical record carrier” *per se*, and **not a system** of a laser for emitting a particular range of wavelengths.

Additionally still, even if one were to read limitations from the Appellant’s specification directly into the claims, the claimed formulaic range of $0.241 \cdot \lambda / n_s$ to $0.362 \cdot \lambda / n_s$ corresponds to a groove depth “range from 100 to 150 nm” and the formulaic range of $0.289 \cdot \lambda / n_s$ to $0.337 \cdot \lambda / n_s$ corresponds to a groove depth “from 120 to 140 nm.”

See page 6, lines 9-10 of the Appellant's specification, which states:

A preferred groove depth for the first recording stack L0 is thus in the range from 100 to 150 nm (from $0.241 \cdot \lambda / n_s$ to $0.362 \cdot \lambda / n_s$), preferably from 120 to 140 nm (from $0.289 \cdot \lambda / n_s$ to $0.337 \cdot \lambda / n_s$).

Turning to the evidence, Muramatsu et al. (EP 1 067 535 A2) factually discloses such a groove depth. That is, Muramatsu et al. (EP 1 067 535 A2) discloses the groove depth as being 140 nm (see paragraphs [0041], [0050], wherein the groove depth d_1 equals $0.14 \mu\text{m}$ (i.e., which equals 140 nm)), which is a number clearly and unquestionably within the range of the claimed formulaic range of $0.241 \cdot \lambda / n_s$ to $0.362 \cdot \lambda / n_s$, which corresponds to a groove depth “range from 100 to 150 nm” and the formulaic range of $0.289 \cdot \lambda / n_s$ to $0.337 \cdot \lambda / n_s$, which corresponds to a groove depth “from 120 to 140 nm.”

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As per claim 2, wherein the groove depth of the recording layer (2) of the first recording stack (L0) is in a range from $0.289 \cdot \lambda / n_s$ to $0.337 \cdot \lambda / n_s$. See discussion above, wherein no range or limit is imposed on the wavelength capable of impinging upon the recording carrier. Moreover as well, the claim is drawn to “a recordable optical record carrier” *per se*, and not a system of a laser for emitting a particular range of wavelengths.

Also note that if one were to read limitations from the Appellant’s specification into the claims, Muramatsu et al. (EP 1 067 535 A2) would still disclose a value within the formulaic (and unbounded within the claims) range of $0.289 \cdot \lambda / n_s$ to $0.337 \cdot \lambda / n_s$, which Appellant discloses corresponds to a groove depth “from 120 to 140 nm.” That is, Muramatsu et al. (EP 1 067 535 A2) discloses the groove depth as being 140 nm (see paragraphs [0041], [0050], wherein the groove depth d_1 equals $0.14 \mu\text{m}$ (i.e., which equals 140 nm).

As per claims 3 and 12 (as well as claim 13, rejected, *infra*), wherein the groove width of the recording layer (2) of the first recording stack (L0) is in a range from $0.198 \cdot \lambda / \text{NA}$ to $0.397 \cdot \lambda / \text{NA}$, in particular in a range from $0.289 \cdot \lambda / \text{NA}$ to $0.347 \cdot \lambda / \text{NA}$, where NA is a numerical aperture of the radiation beam incident on the optical record carrier. Note that the claim does not in any way specify a wavelength, or range of wavelengths, thus rendering the claim open to all wavelengths of electromagnetic radiation, such that the aforementioned range is met by the structural grooves and lands of Muramatsu et al. (EP 1 067 535 A2); neither is the claim limited the by a material or range for the refractive index of material.

Moreover as well, the claim is drawn to “a recordable optical record carrier” *per se*, and not a system of a laser for emitting a particular range of wavelengths.

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As per claim 7, wherein each recording stack further comprises a metal reflective or heat-sink layer (3, 6) arranged on the side of the recording layer facing away from the entrance surface (see paragraphs [0018], [0021]).

As per claim 8, wherein said metal reflective or heat-sink layers (3, 6) are substantially made of a material of the group consisting Ag, Al, Au or Cu (see paragraphs [0018], [0021]).

Again, as it pertains to claims 10 and 15, the phrase “wherein the thickness of the recording layer of at least one recording stack at a groove position is in a range from $0.168 * \lambda/n_r$ to $0.336 * \lambda/n_r$, in particular in a range from $0.235 * \lambda/n_r$ to $0.302 * \lambda/n_r$, where n_r is a refractive index of the recording layer,” does not in any way specify a wavelength, or range of wavelengths, thus rendering the claim open to all wavelengths of electromagnetic radiation, such that the aforementioned range is met by the structural grooves and lands of Muramatsu et al. (EP 1 067 535 A2); neither is the claim limited the by a material or range for the refractive index of material.

Moreover as well, the claim is drawn to “a recordable optical record carrier” *per se*, and not a system of a laser for emitting a particular range of wavelengths.

As per claims 11 and 16, wherein the recording layer (2) of at least the first recording stack (L0) shows a leveling ratio in a range from 0.3 to 0.5, in particular in a range from 0.35 to 0.40, said leveling ratio being defined as the difference between the thickness of said recording layer at a groove position (dG1) and the thickness of said recording layer at a land position (dL1) normalized by the groove depth (d1) - see paragraph [0041].

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-6, 9, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muramatsu et al. (EP 1 067 535 A2).

See the description of Muramatsu et al. (EP 1 067 535 A2), *supra*.

As per claim 13, see the rejection of claims 3 and 12, *supra*.

As per claim 4, Muramatsu et al. (EP 1 067 535 A2) does not expressly disclose at least one additional recording stack between the protective layer and the second recording stack (LN), said additional recording stack comprising a recording layer of an organic dye material and a groove structure and transparent spacer layers sandwiched between the neighboring recording stacks, wherein the groove depth of the recording layer of at least one of said additional recording stacks is in a range from $0.241 * \lambda/n_s$ to $0.362 * \lambda/n_s$.

As it pertains to the phrase “wherein the groove depth of the recording layer of at least one of said additional recording stacks is in a range from $0.241 * \lambda/n_s$ to $0.362 * \lambda/n_s$,” note again that the claim does not in any way specify a wavelength, or range of wavelengths, thus rendering the claim open to all wavelengths of electromagnetic radiation, such that the aforementioned range is met by the structural grooves and lands of Muramatsu et al. (EP 1 067 535 A2); neither is the claim limited the by a material or range for the refractive index of material.

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Additionally, as per claim 5, the phrase “wherein the groove depth of the recording layer of at least one of said additional recording stacks is in a range from $0.289 * \lambda/n_s$ to $0.337 * \lambda/n_s$,” does not in any way specify a wavelength, or range of wavelengths, thus rendering the claim open to all wavelengths of electromagnetic radiation, such that the aforementioned range is met by the structural grooves and lands of Muramatsu et al. (EP 1 067 535 A2); neither is the claim limited the by a material or range for the refractive index of material.

Moreover as well, the claim is drawn to “a recordable optical record carrier” *per se*, and not a system of a laser for emitting a particular range of wavelengths.

Again, as it pertains to claim 6, the phrase “wherein the groove width of the recording layers of at least one of said additional recording stacks is in a range from $0.198 * \lambda/NA$ to $0.397 * \lambda/NA$, in particular in a range from $0.289 * \lambda/NA$ to $0.347 * \lambda/NA$,” the claim does not in any way specify a wavelength, or range of wavelengths, thus rendering the claim open to all wavelengths of electromagnetic radiation, such that the aforementioned range is met by the structural grooves and lands of Muramatsu et al. (EP 1 067 535 A2); neither is the claim limited the by a material or range for the refractive index of material.

Moreover as well, the claim is drawn to “a recordable optical record carrier” *per se*, and not a system of a laser for emitting a particular range of wavelengths.

Turning now to the limitation of additional recording stacks, Official notice is taken which is now considered applicant’s admitted prior art (the Official Notice has never been challenged by appellant) that additional recording stacks (i.e., more than two stacks) in DVD recordable organic-type record-once type recording media, are notoriously old and well known

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and ubiquitous in the art; such Officially noticed fact being capable of instant and unquestionable demonstration as being well-known.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the recording media of Muramatsu et al. (EP 1 067 535 A2) with an additional recording stack, as is known in the art.

The rationale is as follows: one of ordinary skill in the art would have been motivated to the recording media of Muramatsu et al. (EP 1 067 535 A2) with an additional recording stack, as is known in the art in order to increase the recording capacity of the media, in a manner well known, established and appreciated in the art.

As per claims 9 and 14, Muramatsu et al. (EP 1 067 535 A2) remains silent with respect to wherein a thickness of said reflective or heat-sink layers (3, 6) is in a range below 40 nm, in particular below 25 nm.

That is, with regard to claims 9 and 14, although Muramatsu et al. (EP 1 067 535 A2) remains silent with respect to the particular claimed ranges, given the teachings and suggestions of Muramatsu et al. (EP 1 067 535 A2) for providing a reliable recording DVD medium, wherein information is written on one side in multiple layers, using the teachings of Muramatsu et al. (EP 1 067 535 A2) as a demonstrative template, it would have been within the skill of one having ordinary skill in the art to routinely modify the thickness of the layers (3, 6) in the course of routine optimization/experimentation and thereby obtain various standard optimized relationships including those set forth in claims 9 and 14 as nothing more than a *predictable variation* based the on the overarching teachings of Muramatsu et al. (EP 1 067 535 A2).

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That is, given the express conceptual teachings and implied/inferred suggestions of Muramatsu et al. (EP 1 067 535 A2) as a whole, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to routinely modify the thickness of reflective layers (3, 6) in the course of routine optimization/experimentation and thereby obtain various standard optimized relationships including those set forth in claims 9 and 14 in order to arrive at a prescribed reflectivity, which would satisfactorily provide the desired and advantageous results of a multiple layered DVD, having two recording layers on a single side, and thus provide nothing more than a ***predictable variation*** based the on the overarching and pertinent teachings of Muramatsu et al. (EP 1 067 535 A2).

Additionally, the law is replete with cases in which when the mere difference between the claimed invention and the prior art is some range, variable or other dimensional limitation within the claims, patentability cannot be found.

It furthermore has been held in such a situation, the Applicant must show that the particular range is critical, generally by showing that the claimed range achieves unexpected results relative to the prior art range. *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

Moreover, the instant disclosure does not set forth evidence ascribing unexpected results due to the claimed dimensions. See *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338 (Fed. Cir. 1984), which held that the dimensional limitations failed to point out a feature which performed and operated any differently from the prior art.

Additionally, the following 35 USC 103(a) rejections are being made in light of a recent Supreme Court opinion.

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The Supreme Court has issued its opinion in *KSR*, regarding the issue of obviousness under 35 U.S.C. 5 103(a) when the claim recites a combination of elements of the prior art. *KSR Int'l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 82 USPQ2d 1385 (U.S. Apr. 30, 2007).

In the decision, the Court reaffirmed the Graham factors in the determination of obviousness under 35 U.S.C. 5 103(a), inclusive of the four factual inquiries under Graham, which are:

- (a) determining the scope and contents of the prior art;
- (b) ascertaining the differences between the prior art and the claims in issue;
- (c) resolving the level of ordinary skill in the pertinent art; and
- (d) evaluating evidence of secondary consideration.

Graham v. John Deere, 383 U.S. 1, 17-18, 148 USPQ 459,467 (1966).

It is noted that the Court did not totally reject the use of “teaching, suggestion, or motivation” as a factor in the obviousness analysis. Rather, the Court recognized that a showing of “teaching, suggestion, or motivation” to combine the prior art to meet the claimed subject matter could provide a helpful insight in determining whether the claimed subject matter is obvious under 35 U.S.C. 103(a).

More noteworthy, however, the Court rejected a rigid application of the “teaching, suggestion, or motivation” (TSM) test, which required a showing of some teaching, suggestion, or motivation in the prior art that would lead one of ordinary skill in the art to combine the prior art elements in the manner claimed in the application or patent before holding the claimed subject matter to be obvious.

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The Court noted that the analysis supporting a rejection under 35 U.S.C. 103(a) should be made explicit, and that it was “important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements” in the manner claimed.

The Court specifically stated:

Often, it will be necessary . . . to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an **apparent reason** to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis **should be made explicit**.

KSR, Id. at 1396 (emphasis added).

No new or unobvious result is seen to be obtained, given the express teachings and motivations, as espoused by Muramatsu et al. (EP 1 067 535 A2) to provide reflective layers to each recording stack on a single sided DVD medium, and as such, the claimed ranges are seen, absent any unobvious evidence, as nothing more than a **predictable variation** based the on such overarching and pertinent teachings of Muramatsu et al. (EP 1 067 535 A2), in light of the general knowledge of an artisan having ordinary skill in the art, with the express rationale provided *supra*. See *KSR Int'l Co. v. Teleflex, Inc., supra*.

Moreover still, the Supreme Court opined “[w]hen a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a **predictable variation**, § 103 likely bars its patentably.” (Emphasis added) 127 S. Ct. 1727, 1740.

The Examiner finds this situation analogous to the optimization of a range or other variable within the claims that flows from the “normal desire of scientists or artisans to improve

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upon what is already generally known.” *In re Peterson*, 315 F.3d 1325, 1330 (Fed. Cir. 2003) (determining where in a disclosed set of percentage ranges the optimum combination of percentages lies is *prima facie* obvious). In *In re Aller*, 220 F.2d 454, 456 (C.C.P.A. 1955), it was held that the discovery of an optimum value of a variable in a known process is usually obvious. See also *In re Boesch*, 617 F.2d 272, 276 (C.C.P.A. 1980) (“[D]iscovery of an optimum value of a result effective variable in a known process is ordinarily within the skill of the art.”); *In re Geisler*, 116 F.3d 1465, 1470 (Fed. Cir. 1997) (“[I]t is not inventive to discover the optimum or workable ranges by routine experimentation.” (quoting *Aller*, 220 F.2d at 456)); *In re Kulling*, 897 F.2d 1147, 1149 (Fed. Cir. 1990) (finding no clear error in Board of Patent Appeals and Interferences’ conclusion that the amount of eluent to be used in a washing sequence was a matter of routine optimization known in the pertinent prior art and therefore obvious).

Based on the teachings of Muramatsu et al. (EP 1 067 535 A2) and the skill of one having ordinary skill in the art, the Examiner maintains that the experimentation needed, then, to arrive at the particular claimed ranges in the instant application, is “nothing more than routine” application of a well-known problem-solving strategy, *Merck & Co., Inc. v. Biocraft Labs., Inc.*, 874 F.2d 804, 809 (Fed. Cir. 1989), and the Examiner concludes this is, “the work of a skilled [artisan], not of an inventor.” *DyStar*, 464 F.3d at 1371; see also *In re Luck*, 476 F.2d 650, 652-53 (C.C.P.A. 1973) (use of routine testing to identify optimum amounts of silane to be employed in a lamp coating, without establishing a critical upper limit or demonstrating any unexpected result, lies within the ambit of the ordinary skill in the art); *In re Esterhoy*, 440 F.2d 1386, 1389 (C.C.P.A. 1971) (“One skilled in the art would thus manifestly operate the Switzer et al. process

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under conditions most desirable for maximum and efficient concentration of the acid. The conditions recited in the claims appear to us to be only optimum and easily ascertained by routine experimentation.”); *In re Swentzel*, 219 F.2d 216, 219 (C.C.P.A. 1955) (“It may well be that the size represents the largest particles suitable for appellant’s purpose, but the determination of that desired size under the present circumstances involves nothing more than routine experimentation and exercise of the judgment of one skilled in the art.”); *In re Swain*, 156 F.2d 246, 247-48 (C.C.P.A. 1946) (“In the absence of a proper showing of an unexpected and superior result over the disclosure of the prior art, no invention is involved in a result obtained by experimentation.”); “the prior art would have suggested to one of ordinary skill in the art that this process should be carried out and would have a reasonable likelihood of success.” *Merck*, 874 F.2d at 809 (quoting *In re Dow Chem. Co.*, 837 F.2d 469, 473 (Fed. Cir. 1988)).

(10) Response to Argument

Appellant alleges that Muramatsu et al. (EP 1 067 535 A2) does not disclose the claimed invention, apparently since an identical formula that is claimed is not set forth identically or expressly recited by Muramatsu et al. (EP 1 067 535 A2).

The Examiner notes that the Appellant has failed to address the Examiner’s point with regard to the scope of the claims, given that the wavelength λ is not in any way, shape or form, limited in value. That is, the claim does not in any way specify a wavelength, or range of wavelengths, thus rendering the claim *open to all wavelengths of electromagnetic radiation*, such that the aforementioned range is met by the structural grooves and lands of Muramatsu et

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al. (EP 1 067 535 A2); neither is the claim limited the by a material or range for the refractive index of material.

Moreover as well, the claim is drawn to “a recordable optical record carrier” *per se*, and **not a system** of a laser for emitting a particular range of wavelengths.

Additionally still, even if one were to read limitations from the Appellant’s specification directly into the claims, the claimed formulaic range of $0.241 \cdot \lambda / n_s$ to $0.362 \cdot \lambda / n_s$ corresponds to a groove depth “range from 100 to 150 nm” and the formulaic range of $0.289 \cdot \lambda / n_s$ to $0.337 \cdot \lambda / n_s$ corresponds to a groove depth “from 120 to 140 nm.”

See page 6, lines 9-10 of the Appellant's specification, which states:

A preferred groove depth for the first recording stack L0 is thus in the range from 100 to 150 nm (from $0.241 \cdot \lambda / n_s$ to $0.362 \cdot \lambda / n_s$), preferably from 120 to 140 nm (from $0.289 \cdot \lambda / n_s$ to $0.337 \cdot \lambda / n_s$).

Turning to the evidence, Muramatsu et al. (EP 1 067 535 A2) factually discloses such a groove depth. That is, Muramatsu et al. (EP 1 067 535 A2) discloses the groove depth as being 140 nm (see paragraphs [0041], [0050], wherein the groove depth d_1 equals $0.14 \mu\text{m}$ (i.e., which equals 140 nm)), which is a number clearly and unquestionably within the range of the claimed formulaic range of $0.241 \cdot \lambda / n_s$ to $0.362 \cdot \lambda / n_s$, which corresponds to a groove depth “range from 100 to 150 nm” and the formulaic range of $0.289 \cdot \lambda / n_s$ to $0.337 \cdot \lambda / n_s$, which corresponds to a groove depth “from 120 to 140 nm.”

As per claim 2, wherein the groove depth of the recording layer (2) of the first recording stack (L0) is in a range from $0.289 \cdot \lambda / n_s$ to $0.337 \cdot \lambda / n_s$. See discussion above, wherein no range or limit is imposed on the wavelength capable of impinging upon the recording carrier.

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Moreover as well, the claim is drawn to “a recordable optical record carrier” *per se*, and not a system of a laser for emitting a particular range of wavelengths.

Also note that if one were to read limitations from the Appellant’s specification into the claims, Muramatsu et al. (EP 1 067 535 A2) would still disclose a value within the formulaic (and unbounded within the claims) range of $0.289 * \lambda / n_s$ to $0.337 * \lambda / n_s$, which Appellant discloses corresponds to a groove depth “from 120 to 140 nm.” That is, Muramatsu et al. (EP 1 067 535 A2) discloses the groove depth as being 140 nm (see paragraphs [0041], [0050], wherein the groove depth d_1 equals $0.14\mu\text{m}$ (i.e., which equals 140 nm)

Moreover, the Examiner notes that a formulaic range defining structure containing a variable, for example the variable λ corresponding to a wavelength, corresponding to the groove width, only limits the particular structure when there are defined endpoints for the range - for example by limiting the wavelength to a particular range (e.g., wherein $\lambda = 400\text{nm}$ to 700nm). By limiting the wavelength λ to a prescribed range, the structural elements defined by the formula utilizing such a wavelength also are also necessarily limited to a structural range having endpoints, and all values between such endpoints encompassed by the range defined by the formula. However, ***by not limiting the wavelength to any defined range***, i.e., no endpoints whatsoever, the corresponding structure defined by the formula using such an ***open-ended*** range is in itself, unlimited in scope as well.

The Appellant has not even addressed this in any remarks, such that the range is still undefined, or open-ended.

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(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,
/William J. Klimowicz/
Primary Examiner, Art Unit 2627

Conferees:

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